The Vac Scene®

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A bi-monthly newsletter for immunization providers, from Public Health - Seattle & King County (PHSKC). For back issues, visit our website: http://www.metrokc.gov/health



IMMUNIZATION PROGRAM

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Available in alternate formats

- News from the Public Health Vaccines for Children Program
- Protocol for Submission of Varicella Virus Specimens
- Reporting Invasive Pneumococcal Disease
- **Titer Before Varicella Vaccination?**

NEWS FROM THE PUBLIC HEALTH VACCINES FOR CHILDREN (VFC) PROGRAM

LIMIT VACCINE ORDERS TO ONCE PER MONTH!

Continuing vaccine shortages have made it difficult for many providers to forecast their inventory needs. However, because VFC needs to keep shipping costs down, we are strongly encouraging providers to order vaccine only once a month.

When preparing an order, consider how much state-supplied vaccine you have on hand and order only additional doses of each vaccine to meet your needs for the next 30 days. For example: if you are completely out of Prevnar, but have a 10day supply of Hep B, your order would include an approximate 30-day supply of Prevnar and a 20-day supply of Hep B. Review your past Usage Reports to help you estimate the number of doses of each vaccine given in a month. If you run low, please don't hesitate to place another order. Whenever possible, order everything you need at the same time. Avoiding multiple shipments in a month leaves more money to purchase vaccine, and that benefits everybody!

VACCINE USAGE REPORTS

Recently, you may have received a fax from VFC staff with questions about your "Private Provider's Report of Vaccine Usage." We review a provider's inventory numbers with this formula:

$$(A + B) - (C + D) = E.$$

The Beginning Inventory number is "A"; Doses Shipped is "B"; Doses Administered is "C"; and Doses Wasted "D." The resulting number should correspond to the End of Month Inventory number reported by providers, or "E."

It is important to start your calculation with an accurate number. Beginning of Month Inventory (A) should be the same number as the previous month's End of Month Inventory (E). For instance, if September's end count for DTaP was 37; October's beginning count should be 37 as well.

When completing your Usage Report, if your hand count doesn't equal the number derived from the formula, review and confirm the accuracy of your numbers before submitting the report. By the time we receive the inventory reports, it is sometimes too late to determine how an error occurred. However, the "Inventory Fax" we send contains information that may be helpful to providers when completing future inventories.

Please call the VFC Program Coordinator, Darren Robertson, at 206-205-5805 if you have questions.

> PROTOCOL FOR SUBMISSION OF VARICELLA VIRUS SPECIMENS

- Vaccine Administration Intervals
- **Infants' Immune System Stronger Than Parents Think!**
- Hepatitis B Reporting and the Perinatal Hepatitis B **Program**
- 2002 Recommended Childhood Immunization Schedule

Health care providers who are interested in collecting and submitting clinical specimens for varicella virus isolation at the Centers for Disease Control & Prevention (CDC) can now access an on-line varicella specimen submission form: www.metrokc.gov/health/immunization/vzvlabspecform.pdf Providers can submit the form electronically to the CDC, or print it and include in the package with the specimen. If you please questions, contact Communicable Disease/Epidemiology at 206-296-4774.

REPORTING INVASIVE PNEUMOCOCCAL DISEASE

Since pneumococcal conjugate vaccine (PCV7) was licensed in October 2000, the CDC has received several reports of invasive pneumococcal disease among infants and children who had received at least one dose of the vaccine. Because vaccine efficacy is estimated at 97% for invasive disease with pneumococcal serotypes included in the vaccine and 89% for all serotypes, some cases following vaccination are likely.

A tracking system has been established by the Respiratory Diseases Branch at the CDC to: 1) determine the serotype of these invasive pneumococcal isolates; 2) define the host conditions that may contribute to PCV7 failure, and 3) monitor for vaccine lots that may be associated with decreased protection. Cases are limited to children younger than 5 years with invasive pneumococcal infections who have received at least one dose of PCV7.

For an instruction sheet and case report form, go to: http://www.cdc.gov/nip/diseases/pneumo/PCVsurvrpts/default.htm or call the Immunization Program at 206-296-4774. If a clinically significant adverse event occurs after immunization with PCV7, it should be reported to the Vaccine Adverse Events Reporting System (VAERS)

(<u>http://www.vaers.org</u>). Cases of suspected PCV7 failure may also be reported to the VAERS.

TITER BEFORE VARICELLA VACCINATION?

Serologic testing is not needed for individuals who give a convincing verbal history of chickenpox (either self-report or report from parents or other household members). A reliable history of chickenpox is considered a valid measure of *immunity* because the rash is distinctive and subclinical cases are uncommon. Physician documentation of varicella disease is not required.

Serologic testing *is not* generally useful in children up to 13 years of age and is progressively less useful as varicella vaccine coverage increases. Children without a convincing history of chickenpox should be considered susceptible and immunized.

Serologic testing *can be* useful in adolescent and adult vaccination programs. People ≥13 years of age who have reliable histories of varicella are considered immune. Those who do not have such histories are considered susceptible and can either be tested to determine immune status or vaccinated without testing. Because 71-93% of adults who lack a reliable history of varicella are actually immune, serologic testing before vaccination is likely to be cost effective for both adults and adolescents. Adolescents and adults for whom testing may be considered include immigrants, healthcare workers, and women of childbearing age. The Advisory Committee on

(Titers, cont'd)

Immunization Practice (ACIP) does not recommend post-vaccination serologic testing for any group. Varicella antibody testing is available at the Public Health- Seattle & King County Laboratory located at Harborview Medical Center. Collect at least 2 mL of blood in a red top tube and send it via your usual courier to the lab. Be sure to include a King County lab requisition form and request *varicella zoster antibody*. Under urgent circumstances (e.g. when post-exposure vaccination may be indicated), results may be obtained within 24 hours. These cases should be discussed in advance with Public Health's CD/EPI staff to expedite testing (206-296-4774).

If testing indicates the person is not immune to chickenpox, only one dose of vaccine is needed for children age 12 months through 12 years and two doses at least 4 weeks apart are needed for everyone age 13 years and older.

VACCINE ADMINISTRATION INTERVALS

TIMING OF MMR AND VARICELLA VACCINES

A study reported in the November 30, 2001 issue of the Morbidity and Mortality Weekly Report (MMWR) supports the Advisory Committee on Immunization Practices' recommendation that varicella vaccine be administered either on the same day as measles-mumps-rubella (MMR) vaccine or 30 or more days after MMR. A 2.5-fold increase in breakthrough varicella disease was reported in children who received varicella vaccine 1-29 days after MMR vaccine. The study found no increased risk of breakthrough varicella disease among children who received varicella vaccine <30 days after any of the other vaccines (e.g. DTP, Hib, OPV, IPV, or Hep B). The study was conducted among approximately 115,000 children who received varicella vaccine during January 1995 to December 1999; data were obtained from the Vaccine Safety Datalink project. To view this MMWR in its entirety, go to: http://www.cdc.gov/mmwr/PDF/wk/mm5047.pdf

RUBELLA VACCINATION AND PREGNANCY

ACIP has shortened the recommended period to avoid pregnancy after receiving a rubella-containing vaccine from three months to 28 days. This revised recommendation is based upon data from several sources indicating that no cases of congenital rubella syndrome (CRS) had been identified among infants born to women who were vaccinated inadvertently against rubella within 3 months or early in pregnancy. Because a risk to the fetus cannot be completely excluded for theoretical reasons, MMR vaccine and its component vaccines should not be administered to women known to be pregnant.

Most rubella cases in the United States occur among young Hispanic adults born outside of the United States, and most infants with CRS are born to foreign-born mothers. Ensuring immunity in women of childbearing age, especially those at highest risk for exposure, will help to prevent CRS. (MMWR 2001: 50(49);1117)

INFANT'S IMMUNE SYSTEM STRONGER THAN PARENTS THINK!

Excerpted from American Academy of Pediatrics website www.aap.org (Press Release 1/7/02):

Recent surveys have found that an increasing number of parents are concerned that infants receive too many vaccines. An article written by Paul Offit, MD, et al, published in the January 2002 issue of *Pediatrics*, "Addressing Parents' Concerns: Do Multiple Vaccines Overwhelm or Weaken the Infant's Immune System?" should help parents, because it addresses these concerns. Briefly, the article outlines studies showing that:

- newborns are capable of mounting immune responses at the time of birth;
- mild or moderate illnesses at the time of vaccination do not affect the level of protective antibodies produced by immunization:
- a young infant can generate protective immune responses to multiple vaccines at once;
- levels of immunity are just as strong when several

vaccines are given on the same day as when given individually;

- vaccinated children get fewer infections; and
- children are exposed to fewer antigens in vaccines today than in the past.

The article is co-authored by Edgar K. Marcuse, MD, Children's Hospital and Regional Medical Center, Seattle, WA. To view the article in its entirety, go to:

http://www.pediatrics.org/cgi/content/full/109/1/124.

HEPATITIS B REPORTING AND THE PERINATAL HEPATITIS B PREVENTION PROGRAM (PHBPP)

In September 2000, chronic hepatitis B became a legally reportable condition by health care providers and institutions (WAC 246-101). The primary reasons for making chronic hepatitis B virus (HBV) infection reportable are to obtain a more accurate measure of the burden of this disease in Washington and to identify hepatitis B surface antigen (HBsAg)-positive pregnant women. All cases of chronic hepatitis B are reportable within 30 days of receipt of testing except for cases in pregnant women, which are reportable within 3 work days.

Chronic hepatitis B reports

Identification of HBsAg-positive pregnant women prior to delivery is an important component of mandatory reporting that helps assure appropriate and timely post-exposure prophylaxis (PEP) of perinatally-exposed infants. All reported HBsAg-positive pregnant women are enrolled in a tracking and reminder program called the Perinatal Hepatitis B Prevention Program (PHBPP)* to prevent perinatal transmission of hepatitis B virus (HBV) to infants born to HBsAg-positive women. With appropriate and timely PEP, 5% or less of perinatally-exposed infants will become infected with HBV. However, for infants who do become infected, up to 90% develop chronic HBV infection and 25% of these infants will die of liver-related disease.

Although voluntary reporting has been encouraged since 1991, only about 65% of the *expected number* of births to HBsAgpositive women have been identified in Washington State. In 2001, we received 632 new reports of chronic hepatitis B in King County residents, a substantial increase over the 200 to 400 reports received yearly since 1996. In addition to the increased number of reports overall, there is evidence that both the number of HBsAg-positive pregnant women reported each year and the percent reported prior to delivery are increasing. Unfortunately, one-half of HBsAg-positive pregnant women are still reported at or after the time of delivery (often by the delivery hospital), making assurance of appropriate and timely PEP nearly impossible.

Reporting HBsAg-positive pregnant women to Public Health in a timely fashion and documenting and communicating results of maternal HBsAg-screening with the delivery hospital before delivery are the responsibility of the provider. For more information on how to report hepatitis cases, visit http://www.metrokc.gov/health/providers/ and select "Why Report Communicable Diseases?". For information about PHBPP, please contact Linda Vrtis at 206-296-4777.

- * PHBPP staff work with health care providers to assure that:
- Women are counseled about how to prevent transmission of HBV to their infants and household/sexual contacts and receive appropriate follow-up;
- Infants receive hepatitis B immune globulin (HBIG) and hepatitis B vaccine at birth, 1 to 2 months of age, and just after 6 months of age;
- Infants receive post-vaccination testing [HBsAg and antibody to hepatitis B surface antigen (anti-HBs)] 3 to 9 months after the third dose of vaccine to assess for infection and immune status;
- Household/sexual contacts are offered pre-vaccination testing and hepatitis B vaccination series, if susceptible.

2002 RECOMMENDED CHILDHOOD IMMUNIZATION SCHEDULE

Enclosed with this issue of the *Vac Scene* is the new **2002 Recommended Childhood Immunization Schedule.** For additional copies, contact the Washington Department of Health distribution center by fax 360-664-2929 or email **immunematerials@doh.wa.gov**; or visit **www.cdc.gov/nip**